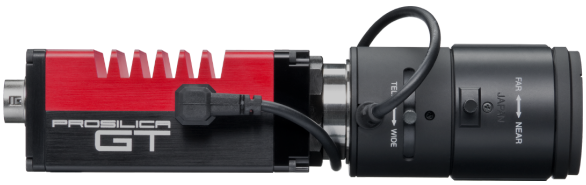
Allied Vision

GiGE VISION

Prosilica GT
3300



- Versatile temperature range for extreme environments
- IEEE 1588 PTP
- Power over Ethernet
- P-Iris and DC-Iris lens control

Engineered for every environment

High-resolution cameras for demanding applications

Prosilica GT 3300 with ON Semi KAI-08050 runs 14.7 frames per second at 8.1 MP resolution.

The rugged housing optimized for heat dissipation makes Prosilica GT the ideal solution for harsh environments. The various lens control options allow constant adjustment of the image brightness to changing light conditions. Offering resolutions of up to 31 megapixels, they are ideal for high-definition imaging applications with demanding requirements of robustness and design-in flexibility.

Easy software integration with Allied Vision's Vimba Suite and compatibility to the most popular third party image-processing libraries.

See the Modular Concept for lens mount, housing variants, optical filters, case design, and other modular options. See the Customization and OEM Solutions webpage for additional options.

Allied Vision

Specifications

Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)
Resolution	3296 (H) × 2472 (V)
Sensor	ON Semi KAI-08050
Sensor type	CCD Progressive
Shutter mode	GS (Global shutter)
Sensor size	Type 4/3
Pixel size	5.5 µm × 5.5 µm
Lens mounts (available)	F-Mount, C-Mount, CS-Mount, M42-Mount
Max. frame rate at full resolution	14.7 fps
ADC	14 Bit
Image buffer (RAM)	128 MByte

Imaging performance

Imaging performance data is based on the evaluation methods in the EMVA 1288 Release 3.1 standard for characterization of image sensors and cameras. Measurements are typical values measured at full resolution without optical filter.

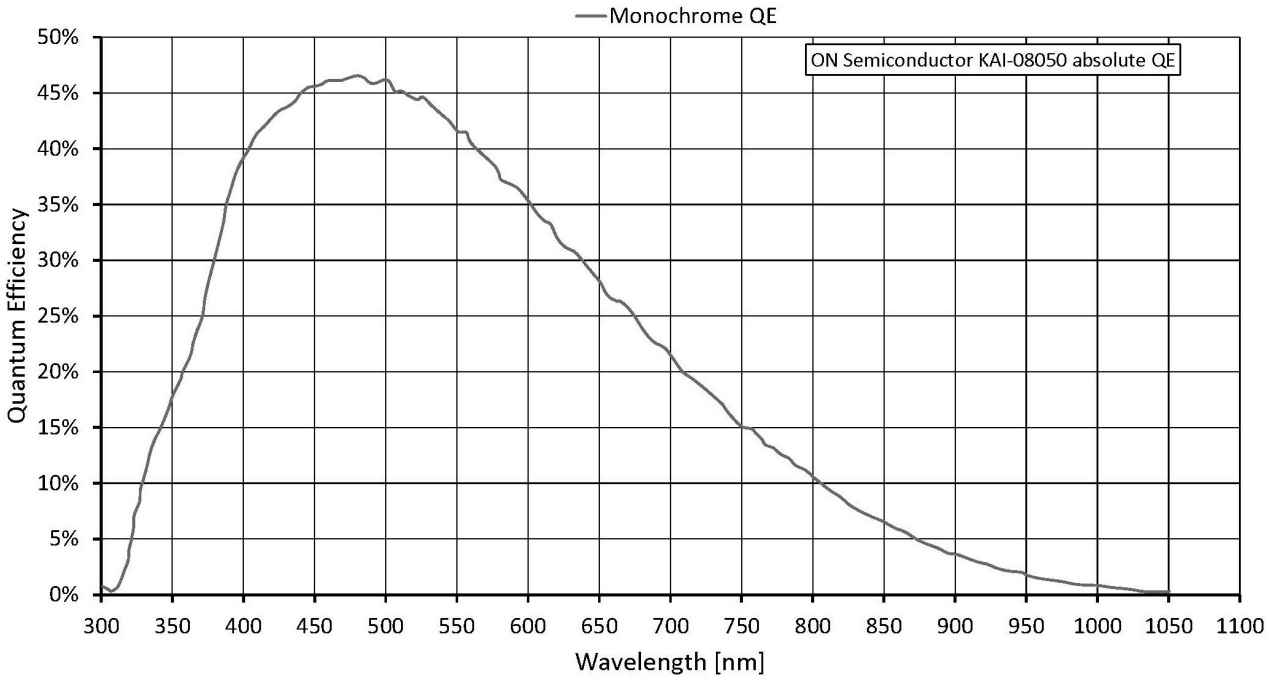
Quantum efficiency at 529 nm	44 %
Temporal dark noise	14.5 e^-
Saturation capacity	18600 e^-
Dynamic range	61.9 dB
Absolute sensitivity threshold	15.0 e^-

Output	
Bit depth	12-bit or 14-bit
Monochrome pixel formats	Mono8, Mono12, Mono12Packed, Mono14

General purpose inputs/outputs (GPIOs)	
TTL I/Os	1 input, 2 outputs
Opto-isolated I/Os	1 input, 2 outputs
RS232	1

Operating conditions/dimensions	
Operating temperature	-20 °C to +60 °C ambient (without condensation)
Power requirements (DC)	7 to 25 VDC AUX or 802.3at Type 1 PoE
Power consumption	5.6 W at 12 VDC; 6.9 W PoE
Mass	314 g
Body dimensions (L × W × H in mm)	121 × 59.7 × 59.7 (including connectors)

Quantum efficiency



Features

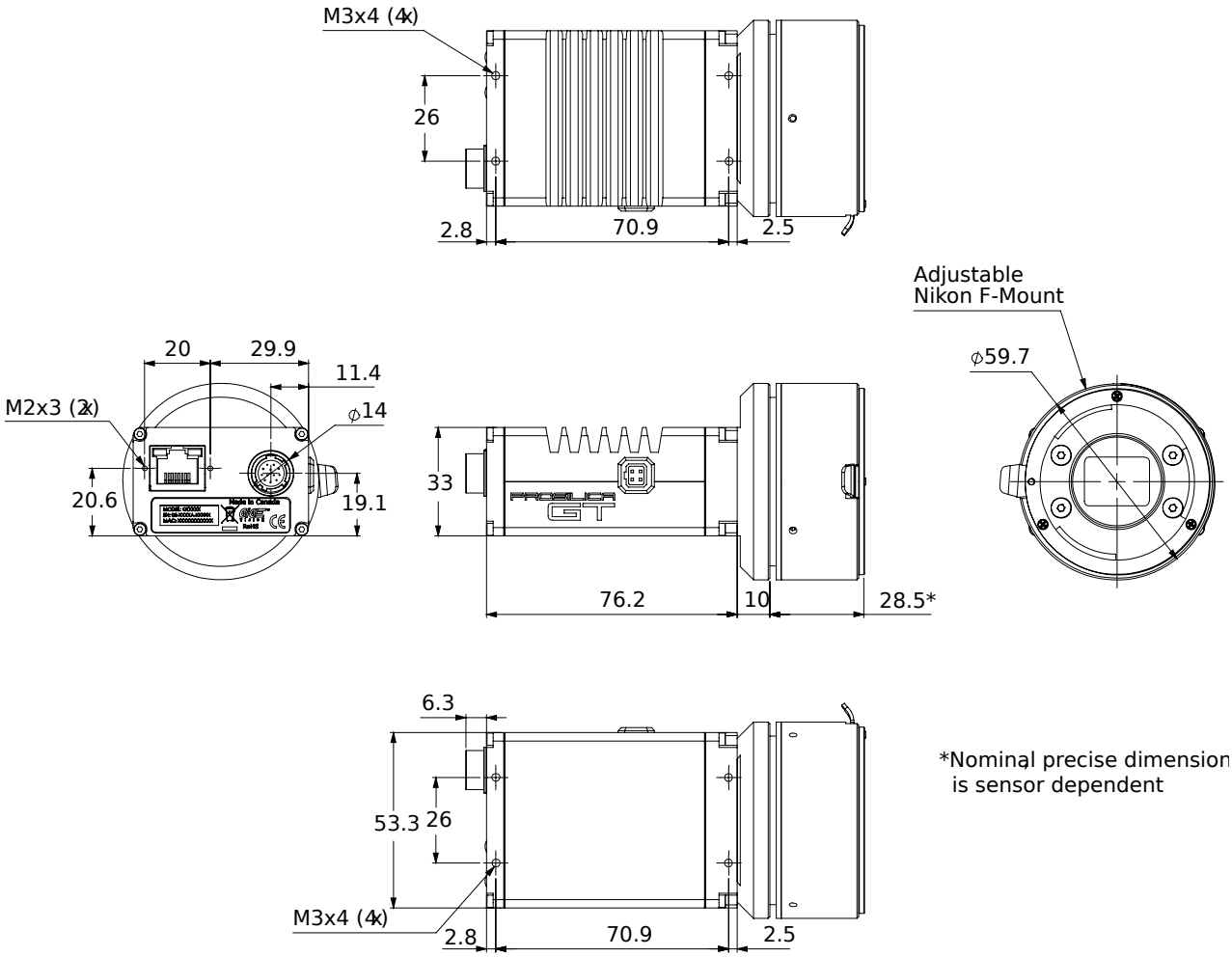
Image optimization features:

- Auto gain (manual gain control: 0 to 32 dB)
- Auto exposure (manual exposure control: 10 µs to 26.8 s)
- Binning (horizontal and vertical)
- Decimation X/Y
- Defect pixel column masking (user defined with Load Defect Tables tool)
- Gamma correction
- Three look-up tables
- Region of interest, separate region for auto features
- Reverse X/Y

Camera control features:

- P-Iris and DC-Iris lens control
- Event channel
- Image chunk data
- IEEE 1588 Precision Time Protocol
- RS232
- Storable user sets
- StreamBytesPerSecond (bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Tap mode switchable in Vimba Viewer 2.0 or later (four-tap, one-tap)
- Temperature monitoring (main board and sensor board)
- Trigger over Ethernet Action Commands

Technical drawing



Applications

Prosilica GT3300 is ideal for a wide range of applications including:

- Outdoor imaging
- Traffic imaging and Intelligent Traffic Systems
- Public security and surveillance
- Industrial inspection
- Machine vision
- Military and space applications